

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/530,694

REMARKS

Review and reconsideration on the merits are requested.

Applicants amend claims 1 and 6 to further define the nature of the semi-hard magnetic material of the present invention. Basis occurs in Table 2, Sample No. 18 and in the second paragraph of the “TECHNICAL FIELD” at the beginning of the present specification.

A hard magnetic material cannot be demagnetized, and thus the above language excludes a hard magnetic material. A soft magnetic material can maintain a magnetized state if an applied magnetic field is maintained on the soft magnetic material. Accordingly, Applicants define the magnetic coercive force of the semi-hard magnetic material of the present invention as being greater than or equal to 800 A/m. The magnetic coercive force of a soft magnetic material is typically less than 80 A/m. Thus, this particular limitation distinguishes the semi-hard magnetic material of the present invention from a soft magnetic material and should, it is believed, comply with the spirit of the remarks in the Advisory Action. For the Examiner’s convenience, please see the ANNEX attached hereto.

The Examiner’s is requested to review the later discussion regarding the amount of Ni in Nakanishi on this point.

With respect to the rejection based on on Nakanishi, Applicants have the following comments on the language “layers A each consist essentially of Fe in claims 1 and 6. Layer “A” is preferably pure iron, but may include a small amount of unavoidable elements¹. The reason

¹ See the discussion on page 7 of the specification regarding deoxidizing elements such as Al and/or Si and/or Mn and corrosive resistive elements such as Cr, or C contributing to strength. It is not believed any such elements would be at the 25-60% of Ni of Nakanishi.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/530,694

for this is the fact that it is difficult to obtain truly pure iron. Applicants believe that this feature of a layer “A” would be understood by anyone skilled in the art from the specification, most especially the 7th and 8th paragraphs of “TECHNICAL FIELD”, and the second paragraph of “(Embodiments)” in the paragraph bridging pages 15/16 of the specification.. Thus, although the Examiner considers that a layer “A” may also be the Fe-Ni alloy of Nakanishi, Nakanishi discloses that the Fe-Ni alloy therein preferably includes 25-60 weight % of Ni. Applicants refer to paragraph 0021 of Nakanishi and also refer to Nakanishi U.S. at column 7 about lines 10-20.

Assuming that the Examiner agrees that the above feature of a layer “A” are correctly defined in the claims, Applicants respectfully submit that the present invention is clearly distinguished from the prior art relied upon in light of Applicants previous arguments. Most especially, Applicant believe that this is the case because Ni and Cu readily dissolve in each other and, as a consequence, the Cu phase cannot be finally distributed in the Fe-Ni alloy of Nakanishi.

For the reasons now advanced, Applicants believe that the amount of Ni in Nakanishi will clearly be excluded by the “consisting essentially of” language in claims 1 and 6 regarding layer “A”.

The Fe-Ni alloy disclosed in Nakanishi (which includes 25-60 % of Ni) is outside of layer “A” defined in claims 1 and 6 now pending in this application (which “consists essentially of Fe”). This is because Ni is readily dissolved with the Cu of layer “B”, that is, the Ni in Nakanishi materially affects the basic and novel characteristics of layer “A”, whereby a Cu phase can not be finely distributed therein.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/530,694

However, if the Examiner disagrees with the above assessment, Applicants add new claims where they rewrite "consisting essentially of" into "consisting off".

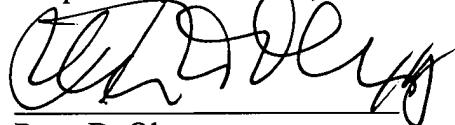
Applicants do remain relatively flexible in the language used in the claims, and this is especially the case with "consisting essentially of" to define the above concepts regarding layer "A".

Withdrawal of any outstanding rejection and allowance is requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Peter D. Olexy
Registration No. 24,513

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Date: April 21, 2003



Annex

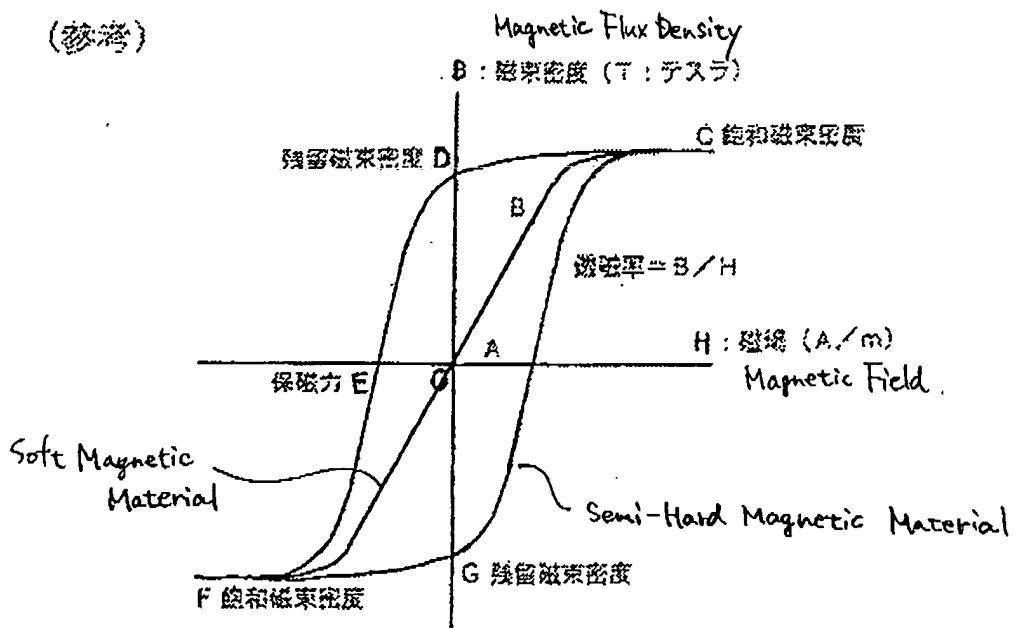


図2 B-H曲線 (磁気ヒステリシス曲線)

B-H Curve (Magnetic Hysteresis Curve)

\overline{OD} : Residual Flux Density

\overline{OE} : Magnetic Coercive Force